

ABSTRACT OF THE DISCLOSURE

A scintillator for an electron microscope includes a substrate (24) of optically transparent material in disc shaped form, a retaining ring (20) of highly conductive material having a non-oxidizing surface around the substrate and having a radially inwardly extending lip (22) on one end , a coating of indium tin oxide (26) on surface (28) of the substrate, electrically conductive adhesive material (32) between the lip and the radially outer part of the coating, and scintillator material (36) bonded to surface (38) of the coating. The indium tin oxide coating may be applied by sputtering and the scintillator material may be deposited onto the coating by settlement deposition. All contacting surfaces are intimately bonded to provide maximum conductivity resulting in better signal to noise ratio. The conductive substrate minimizes pinhole interference, the scintillator is easier to handle during installation and no aluminum overcoating is required.